

3D SMARTone Phone Case Decoration System

Installation and Operation Guide



Process in a Nutshell:

The SMARTone is used to decorate a wide range of phone case models.

A sheet of A5 film is printed in the WP-4015 printer.... any image can be printed.

A blank phone case and a sheet of A5 film are loaded into the SMARTone.

The SMARTone process transfers the image from the printed sheet into the phone cover.

After just a short time to cool the case is ready for use.

3D SMARTone INSTALLATION AND OPERATION

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EPSON WP-4015 PRINTER SET-UP AND OPERATION

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1. Safety

WARNINGS

	Inner surfaces become hot. Avoid touching inner surfaces when hot.
	When loading and unloading parts always use gloves. When loading and unloading jigs always use gloves.
	Do not remove any panels without disconnecting from electricity supply.
	Only connect SMARTone to specified voltage supply: 110V or 230V



Operators should wear cotton gloves when using the **SMARTone** since internal surfaces will become hot. Something similar to the gloves pictured here is ideal. It offers a good balance between protection and function – you can still handle parts easily. You should keep the gloves clean to prevent any contamination of the blank parts and film you will be handling. If the gloves become dirty, they should be replaced and are commonly available worldwide at a low cost. Your **SMARTone** comes with one pair of gloves to help you get started. Very thick gloves should be used for handling hot jigs

Safety Instructions

SMARTone

- The SMARTone weighs 36Kg: two people should lift the unit
- Do not look directly at the internal lights
- The SMARTone should be connected directly to an electrical outlet/socket; do not use multiple outlets as current rating may be exceeded
- Only use approved jigs
- Only use approved phone case blanks in the SMARTone. These are carefully designed to give optimum decoration performance. Using non-approved items may risk fire or toxic fumes and may damage the press.
- Ensure hot jigs are safely stored after removal
- Do not transport SMARTone with a jig installed, always remove prior to shipping.
- Do not use solvents or flammable liquids near the SMARTone

Printer

- Never disassemble or attempt to refill the ink cartridges
- Do not use an ink cartridge if it is damaged or leaking
- If you get ink on your skin use soap and water to wash it off
- If you get ink in your eyes irrigate thoroughly with water
- Do not force movement of the print head
- Always turn off the printer on the front panel before disconnecting from the mains power

General

- Never allow children to operate the equipment
- Keep liquids away from the equipment
- Only use approved spares

2. Specifications

	SMARTone
Description	Self-contained vacuum/heat press for 3D dye sublimation.
Size	Width: 375mm, Height: 400mm, Depth: 475mm
Weight	36Kg
Packed dimensions	Width: 470mm, Height: 560mm, Depth: 633mm Weight: 42Kg
Voltage	220-240V 50Hz 110-120V 60Hz
Current (max)	8A @ 220-230V 15A @ 110V-120V
Power (max)	2kW
Vacuum Pump	Built-in
Jigs	Quick swap, fixed position jigs to match cases
Decoration time	<5min
Time to first transfer	<15min

PRINTER	Epson Workforce Pro WP-4015-DN
Size	Width: 460mm Height: 380mm Depth: 425mm
Weight	11Kg
Voltage	110-240V 50/60Hz
Current (max)	0.5A
Power (max)	22W
Packed dimensions	Width: 620mm, Height: 480mm, Depth: 520mm, Weight: 15Kg
Interface	USB 2.0
Driver	Windows XP , Windows 7
Ink set	4 Colour cartridge
Print resolution (max)	4800x1200 dpi
Print speed	1 min/A5 sheet (approx)
Ink cartridge capacity	Black=49ml; Yellow, Magenta, Cyan 29ml

CONSUMABLES	
Transfer film	“ SMARTone 3D Film”. Fast drying thermo-formable inkjet film. A5 sheet format
Cases	Wide range of “ SMARTone PC Cases”
Pack size	48 units per pack
Ink	“ SMARTone DS ink”

Temperature and Humidity operational specification	15°C-30°C <50% RH
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3. Installing the SMARTone

- Remove all packing from the SMARTone
- Locate the SMARTone on a stable flat surface
- Locate the SMARTone in a well ventilated area
- Locate the SMARTone away from sources of dust
- Retain the SMARTone packaging to allow safe transportation
- Connect power cord to electrical outlet

4. Preparing the SMARTone

Before powering on, you should fix the required support jig into the **SMARTone** drawer.



Samsung Galaxy S3 Jig

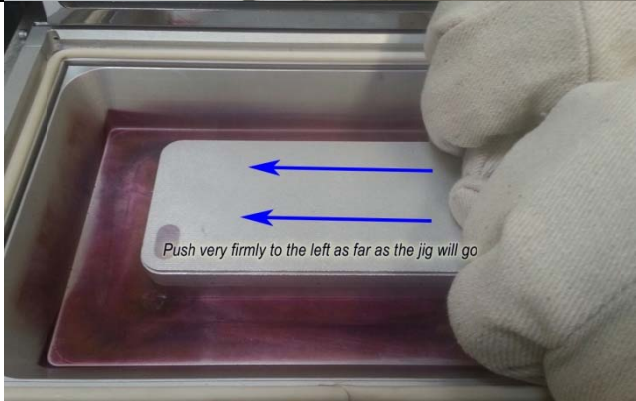
- A jig is available for each blank part model.
- The jig provides support for the phone cover during decoration
- It also ensures the correct position of the image on the case
- The correct jig must be used for the part to be decorated eg you must use a Samsung Galaxy S3 jig to decorate Samsung Galaxy S3 parts. No other model will fit correctly.



Smaller location hole on left

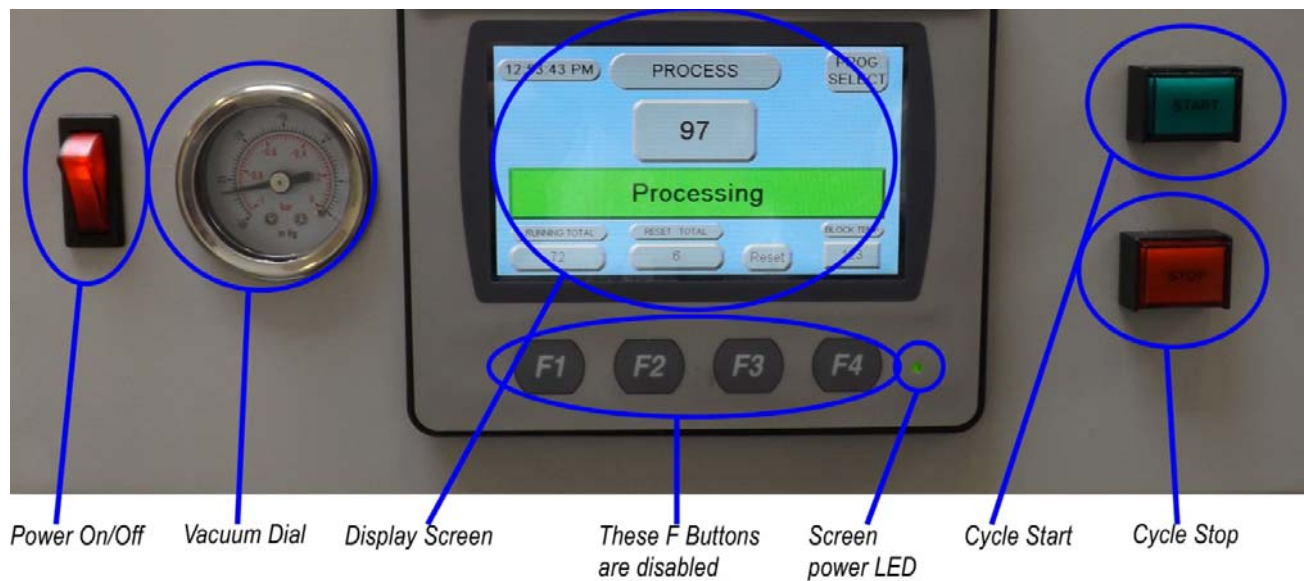
- The locking system ensures jigs can only be fitted one way

3D SMARTone INSTALLATION AND OPERATION

 Smaller hole in jig lines up with smaller pin on platen	Line the jig correctly with the locking pins
	There is only one way it will go around – make sure you push it firmly into place
 Push very firmly to the left as far as the jig will go	- Push firmly to left to lock - You can swap out the jig at any time. - Wearing thick gloves, dislodge the jig by pushing it to the right and fit the new jig into place.
	- Press the 'NEST WARM' button on the screen - The button will turn red until the jig is heated

	Use thick gloves when loading and unloading jigs
	If a hot jig is removed from the SMARTone ensure it is kept in a safe place as it will remain hot for some time

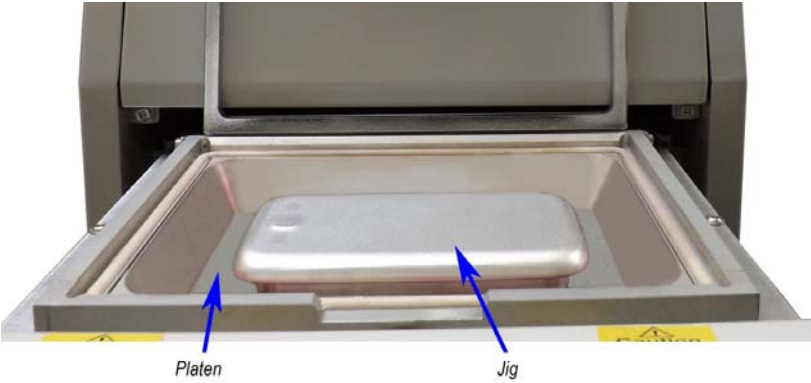
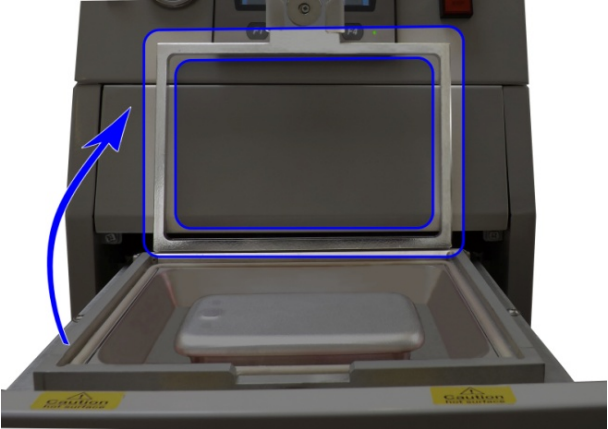
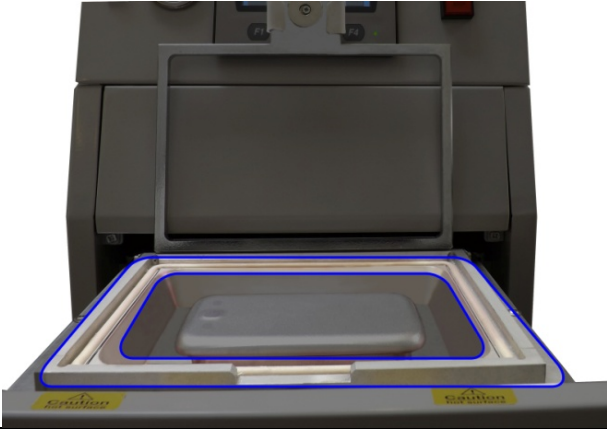
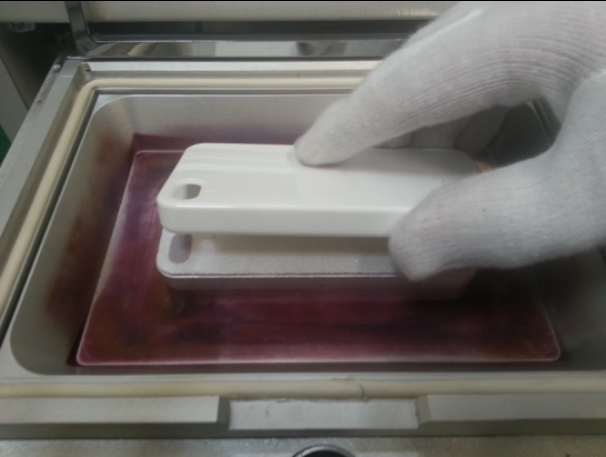
5. The Control Panel and powering on



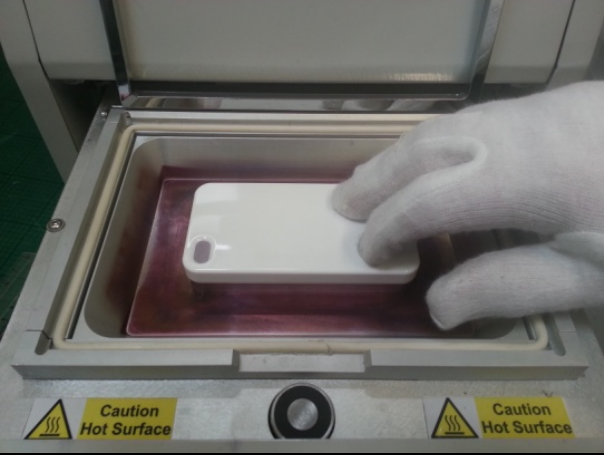
- Flick the red power switch to start the **SMARTone**
- The **SMARTone** will now begin a 'warming up' cycle to bring the drawer and jig up to operating temperature.
- Initial warm-up will take around 15 minutes.
- The **SMARTone** will not run a decoration cycle unless it is at operating condition.
- Once at operating condition the **SMARTone** will maintain this so that it is ready to use, even if you leave it idling for an extended period of time.

To ensure that the press is always ready keep the drawer closed when not in use.

6. Decorating a part

 Platen Jig	• When you are ready to decorate a part, open the drawer. • Here is a look at the drawer in detail. • The platen and jig will become hot during the process.
 	• This is the frame. This is used to clamp the film into place. • Raise it to load film. • When the frame is down, it rests against a silicon foam seal. • Take care not to cause damage to the seal – replacements can be fitted easily if necessary.
	• Clip the blank phone case onto the jig. • The top of the part should always go to the left hand side (camera holes are normally located at the top). • Extra care should be taken to ensure that the case is clipped on in this way.

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	• The case should fit tightly onto the jig. • Press all around the edges to make sure the part is securely in place. • Do not leave the part in the press for more than 20 secs before adding the film and starting the cycle to prevent possible part distortion.
 <i>Top of image to left, print side down. Align sheet with back left corner to keep consistent registration.</i>	• Load the film - print side down and - top of the print to the left. - Print templates supplied with the SMARTone system will feature a red dot in the top left corner of the print, so that orientation can be easily identified on the printed sheet of film. This also denotes the corner of the film that is to be used for registration as shown in the illustration to the left. It is recommended that a similar mark is used if you are making your own templates. • Close the frame • Push the drawer firmly closed As soon as the film is loaded close the drawer. The film may distort if this procedure is not done quickly
	• Press the Cycle Start button. • The SMARTone will now take care of everything.
	Caution – be careful not to run a cycle with printed film but no part, as the dye will be transferred onto the surface of the jig and then will be transferred to the inside of the next parts you run. If this happens remove the jig from the drawer and allow it to cool. The jig can be gently cleaned with water and a scouring pad (eg 3M Scotch-Brite green)

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	• The screen will show the process timer counting down • The dial will show the vacuum level. NB: the vacuum level will pulse in the initial stages of the cycle • When complete, a buzzer will sound and the drawer can be opened.
	• Remove the film and unclip the part. • SMARTone part removal tool is recommended
	• The part will cool quickly and can then be used/packaged for sale straightaway. • The SMARTone is ready for its next cycle. • Either load the next part or close the drawer to keep warm. The keep warm cycle starts 2 minutes after the drawer is closed if the start button has not been pressed.

If you need to change between cycle programs:



Press 'Prog Select' on the screen. The Program Selection menu will appear. Use the arrows to choose the program you require, then press 'Process' to return to the main screen. You can now continue as normal using the program you have selected.

7. Troubleshooting

- ***The part is difficult to remove from the jig***

It is easiest to remove the part from the jig whilst it is still hot as the plastic will tighten as it cools. Ensure that a part is not allowed to go cool on the jig as it will become difficult to remove. If this happens, simply close the drawer and start a cycle, allow around 15 seconds then abort the cycle by pressing the stop button and then the part can be removed. By prising gently at the corners of the front edge the part will unclip easily.

- ***There are white spots on the finished part***

The SMARTone process relies on good contact being made between the printed film and the surface of the part during the cycle.

Small white dots or fine lines on the finished part point to some dust or other particles obstructing this contact.

Solution: Ensure that film is printed only as required or sufficiently protected so that dust cannot gather on the surface. Wipe the blank part before use with a clean, lint-free cloth. As the part is white, contamination will be visible on close inspection, so should be cleaned off adequately.

- ***The decoration looks weaker than expected and/or appears blotchy***

The ink on the film is not dry. Each print will require some drying and there is a handy drying frame on top of the SMARTone for this purpose. Film should be placed in this drying frame print side up with the long edge of the film facing away from the operator i.e. the film is clipped into the tray bowing upwards to allow air circulation. A minimum of 2 minutes is sufficient to dry most printed sheet. For darker images that have a relatively high ink load 3 minutes is recommended.

- ***The vacuum drops suddenly during a cycle***

Allow the cycle to finish – do not abort as the quality of transfer may not be affected depending on how well vacuum held initially.

- Ensure film is properly clamped by the frame
- Ensure seal is not damaged – replace if required
- Ensure jig is properly clipped into place and is not damaged

If the jig has been significantly damaged and cannot be thoroughly repaired then a replacement should be purchased to avoid further wastage of film and parts.

8. Maintenance

The SMARTone is designed to require minimum maintenance if operated according to the instructions.

If you notice a persistent decrease in vacuum level or reduction in decoration quality, contact your supplier for advice.



8. Installing the Epson WP-4015 Printer

- Remove all packaging according to instructions supplied with the printer
- Locate the printer on a stable flat surface
- Locate the printer in an environment 15-30C, <50% RH
- Locate the printer away from sources of dust



Only use **SMARTone** inks.
Other inks, including Epson own brand, are not compatible with the decoration process.
Non- **SMARTone** inks may damage the printer.

9. Printer preparation and settings

Printer front panel:

Do the following when turning on the printer for first time:



Load inks:

Open front cover

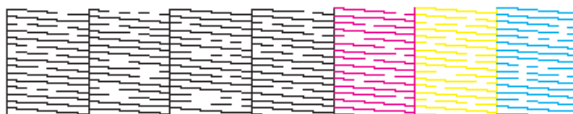
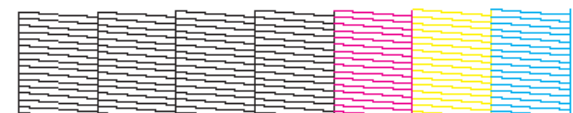
Remove ink cartridges from packaging
Insert according to instructions on cover
NB green chip is located at top of cartridge
Close the cover and allow the printer to load the inks.

Ink loading will take approx 5 minutes
NB Do not turn off printer during this process

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	Use the 'multi-purpose' tray at the rear. Fold the clear cover forward. Pull up fully to lock in place.
	Film guides are self-centering . Put a sheet of A5 in tray and push guides until just touching each edge. The film should be flat and not bowed by the guides.
	Load plain A4 paper into the front cassette. This is used to check the printing Pull out cassette, load paper and return cassette.
	Fully extend the output tray to catch printed film. NB: ensure that the print tray will not get knocked when extended.
	Make a nozzle check to ensure ink is loaded correctly: 1) Turn off printer (if turned on) 2) Hold down the colour nozzle clean button and press the power button. A test pattern will be printed (using plain paper from the front cassette).

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3) All the segments of test lines should be present
As shown on left

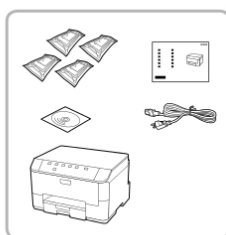
If segments are missing the print nozzles need cleaning.
Press the appropriate nozzle clean button:
ie if magenta, yellow or cyan are affected press the colour
nozzle button, if black is affected press the black nozzle
button

NB Nozzle checks and cleaning can also be run from driver
software

WP-4011 / WP-4015 / WP-4025

EPSON
EXCEED YOUR VISION

- EN Setup Guide
- FR Guide d'installation
- DE Installationshandbuch
- NL Installatiehandleiding
- IT Guida di installazione
- ES Guía de instalación
- PT Manual de instalação
- CA Guia d'instal·lació
- DA Installationsvejledning
- FI Asennusopas
- NO Installationshåndbok
- SV Installationshandbok
- RU Руководство по установке
- UK Посібник зі встановлення
- AR دليل الإعداد



Owner's manual for installation.
For the printer to be used, it must be
installed correctly. Please read the
manual before using the printer.
If the printer is not installed correctly,
it may not work properly.
Consult the manual for details.

Installation manual for the printer.
For the printer to be used, it must be
installed correctly. Please read the
manual before using the printer.
If the printer is not installed correctly,
it may not work properly.
Consult the manual for details.

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Model: WP-4011 / WP-4015 / WP-4025
PowerLite 1000



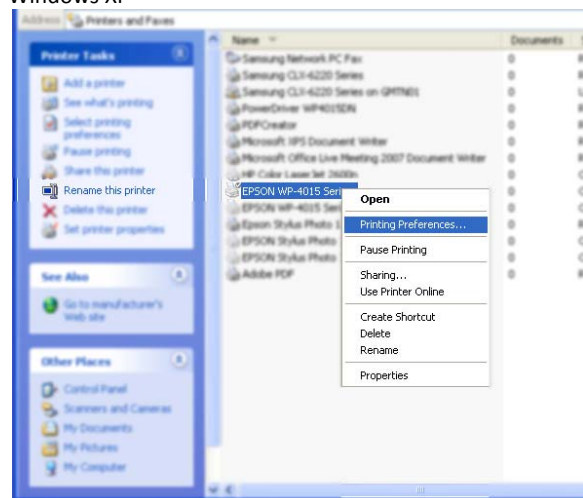
Once the printer is set up load the driver software following the
instructions in the Epson documents.

USE USB CONNECTION

Accept the default settings.

Note: decline any requests for registration or updates from
Epson.

Windows XP

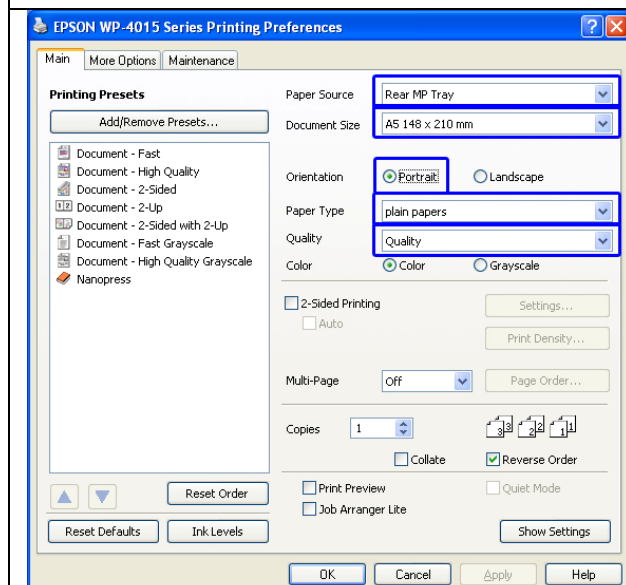
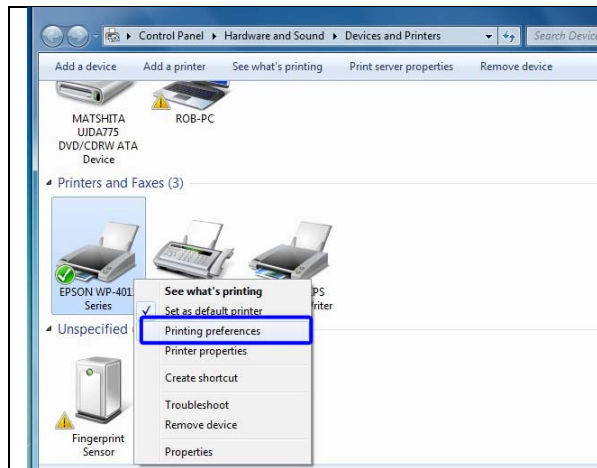


Once the driver is installed it must be configured.

Right click on printer and select 'Printing Preferences'

Windows 7

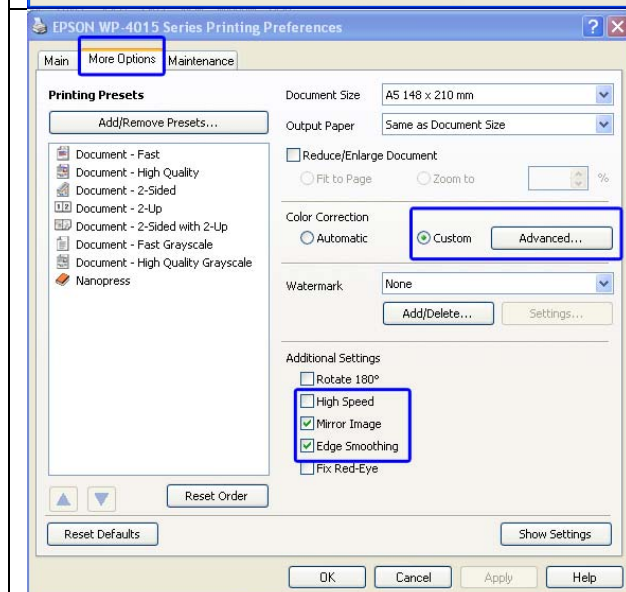
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Configure Main page like this:

- 1 Paper Source= Rear MP Tray
- 2 Document Size= A5
- 3 Orientation=Portrait
- 4 Paper type=plain paper
- 5 Quality=Quality

Other settings should be default

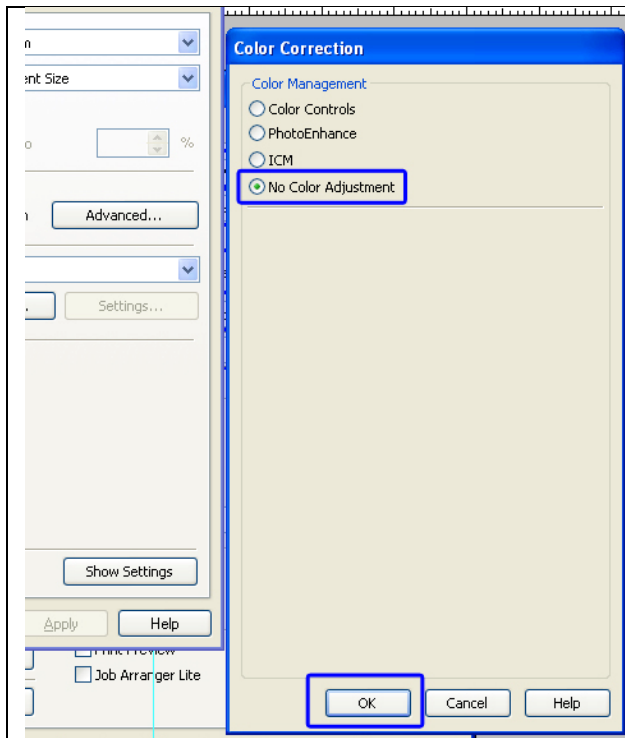


Configure More Options page like this:

- 1 High speed=unchecked
- 2 Mirror Image=checked
- 3 Edge Smoothing=checked

4 Color Correction= Custom
Then click 'Advanced.....'

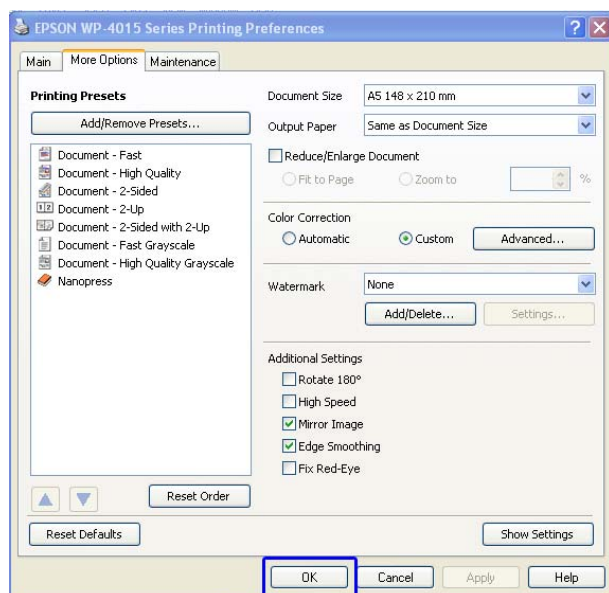
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NB This method is for printing via Photoshop

In Color Correction select No Color Adjustment.

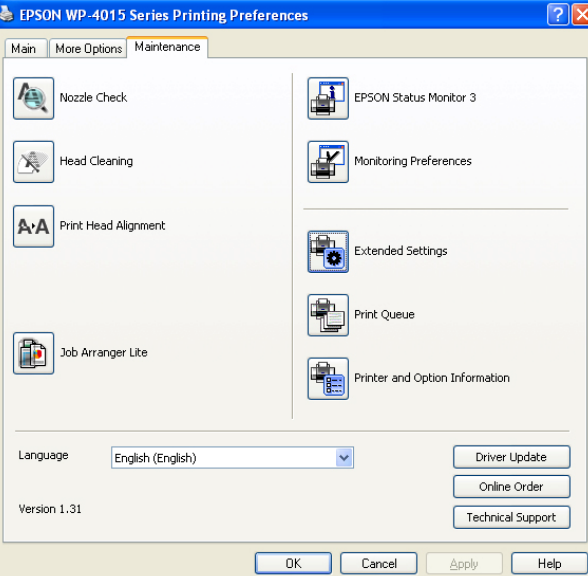
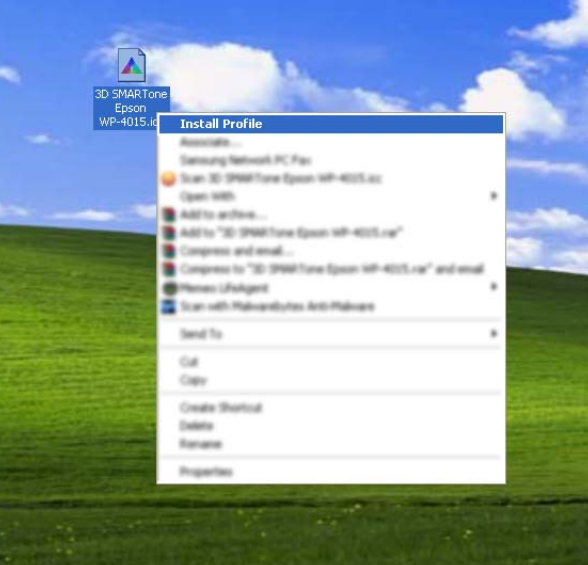
Then click OK to close color correction



Finally, click OK to close the preferences dialogue.

These settings will now be active when printing from an application.

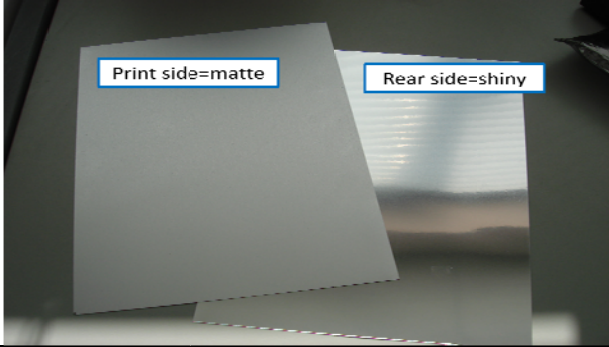
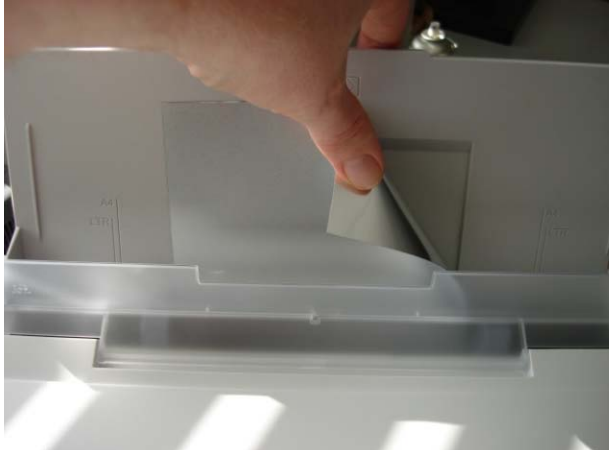
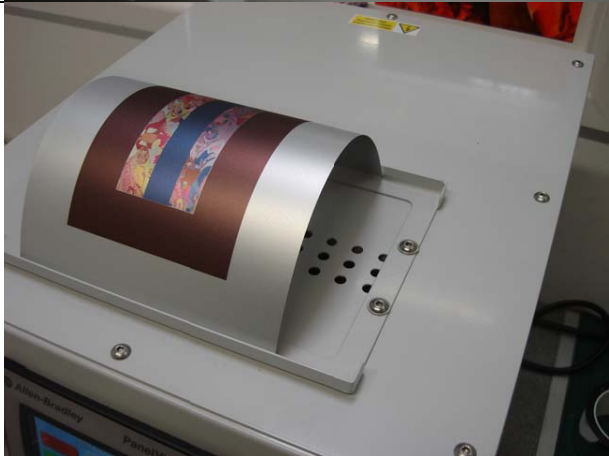
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	Note: it is possible to print nozzle checks and run nozzle cleaning from the Maintenance page.
	To install the ICC profile: Right click on file and click 'Install Profile' from menu. The profile is then copied into the operating system.

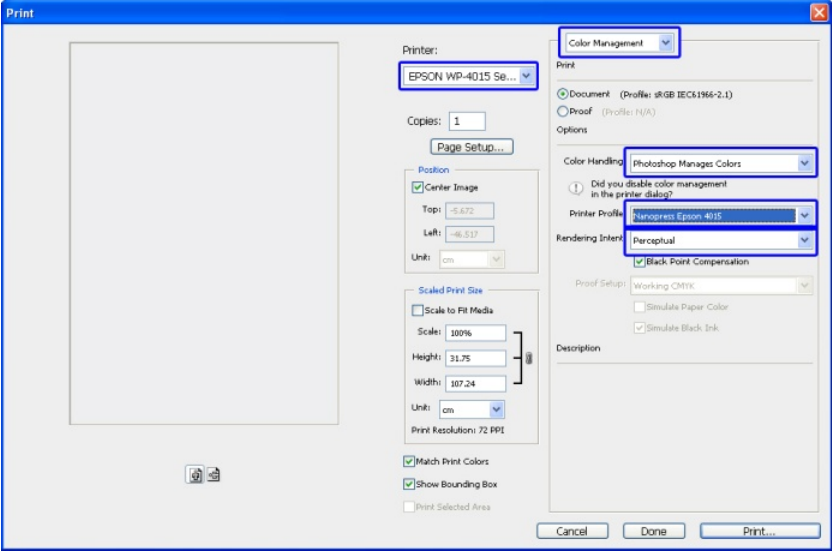
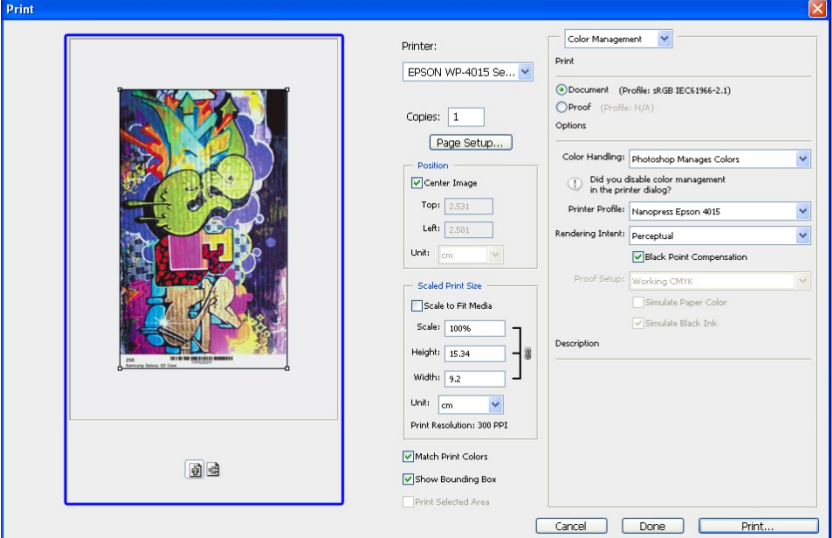
10. Film Handling and making a print

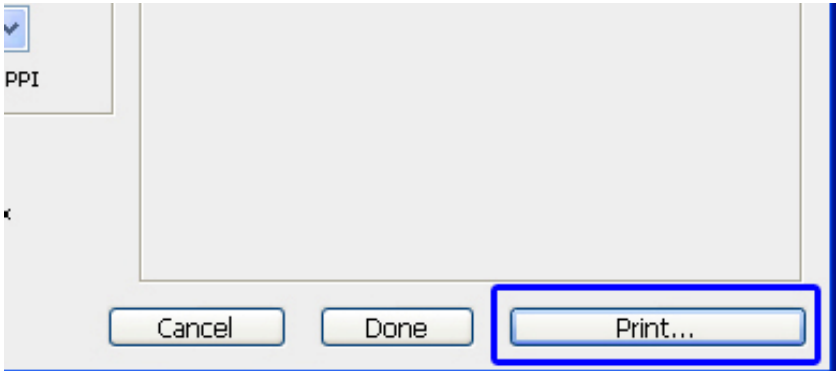
	Store film in packet and re-seal when not required. Avoid touching the printing area of the film surface.
It is only possible to print on the matte side of the film.	

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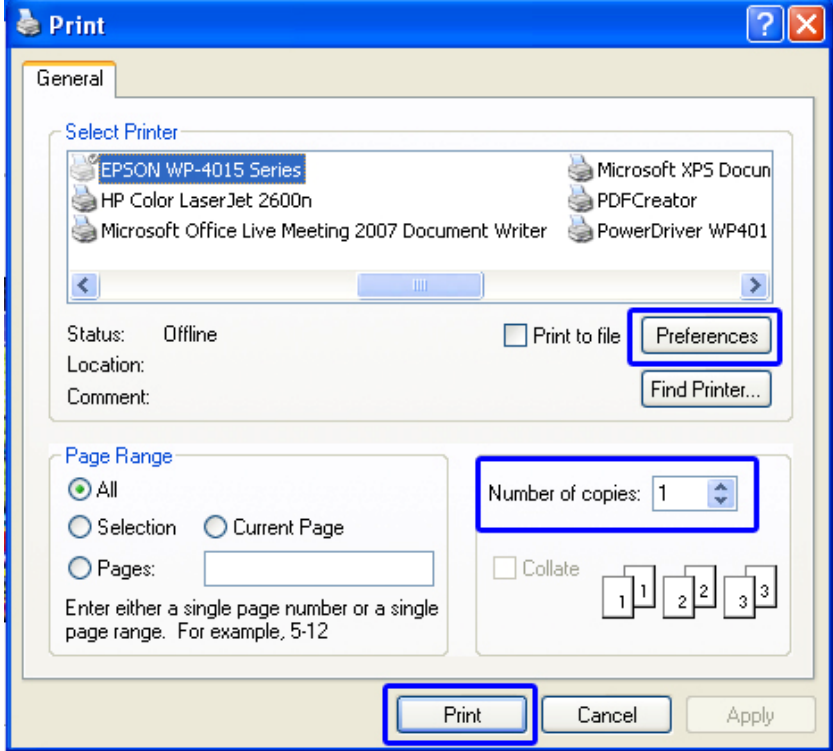
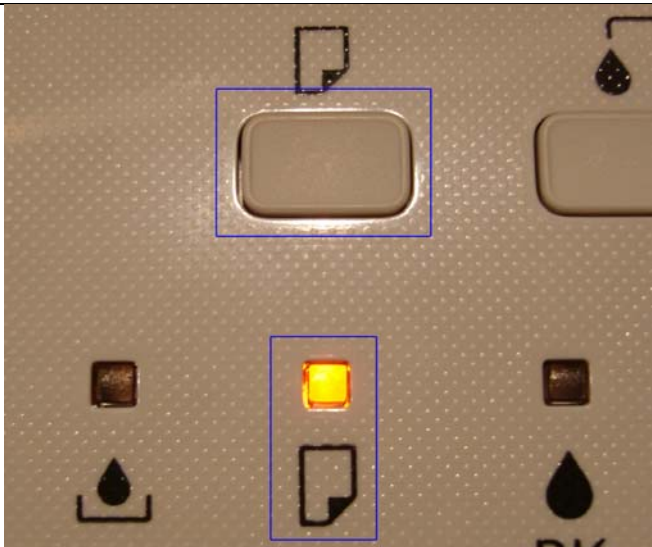
	
	Place film in printer with print (matte) side facing forward. Only load one sheet of film at a time. If multiple sheets are loaded it is possible more than one sheet will be pulled through the printer.
	Once printed take care not to damage film surface. The ink will be wet on the surface and needs a few minutes to dry. Always keep film printed surface upwards. Avoid stacking the printed sheets.
	There is a drying frame built into the top of the printer. It is best to load the film sheet in the manner shown here.

11. Printing from Adobe Photoshop

	Set-up Photoshop to apply profile. NB versions of Photoshop differ in the layout however:- 1) Select Printer= Epson WP-4015 (it should be default) 2) Select 'Color Management' 3) Select Color Handling= Photoshop Manages Colors 4) Select Printer Profile= SMARTone Epson 4015 profile NB scroll down list 5) Select Rendering Intent=Perceptual 6) Either click 'Done' to exit and save settings or press 'Print'
	To print: Enter the print dialogue. Check principle setting are applied as above Check orientation of image is correct in preview
	Here the print orientation is WRONG. Click the icon at the bottom set correct orientation

	By clicking the button at the bottom the orientation is corrected. NB you can also rotate the orientation in Photoshop and keep the print setting constant.
	Press Print button in Photoshop. Press the Print button in Photoshop The print dialogue box will open. Confirm that the Epson WP-4015 is the target printer. If necessary check the preferences are set correctly. The number of copies can also be set here. Load a sheet of film in to the printer

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	and press 'Print;
	If film is not loaded the feed light will illuminate on the printer. In this case load a sheet and press the feed button. The print will then continue. If multiple copies are being made, allow each sheet to complete before loading the next. Use the feed button until all the copies are completed.

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If you wish to cancel a print job press the 'trash can' button

APPENDIX 1

Windows (Minimum requirements)

- Intel® Pentium® 4 or AMD Athlon® 64 processor
- Microsoft® Windows® XP with Service Pack 3 or Windows 7 with Service Pack 1. 1GB of RAM
- 1GB of available hard-disk space for installation; additional free space required during installation (cannot install on removable flash storage devices)
- 1024x768 display (1280x800 recommended) with 16-bit color and 256MB (512MB recommended) of VRAM
- OpenGL 2.0-capable system
- DVD-ROM drive
- Broadband Internet connection may be required for software activation, validation of subscriptions, and access to online services.